

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 –10 (cancelled)

Claim 11 (currently amended) A method of separating wax from a wax-containing feedstock comprising the steps of:

- a) introducing a wax-containing gas stream into a heating zone, wherein said heating zone contains a first heat exchanger,
- b) elevating said heating zone to a first temperature, wherein substantially all of the wax present in said wax-containing gas stream is prevented from undergoing a phase change,
- c) introducing said wax-containing gas stream into a cooling zone, wherein said cooling zone contains a second heat exchanger, and
- d) reducing said cooling zone to a second temperature, wherein substantially all of the wax present in said wax-containing gas stream is solidified onto the surface of said second heat exchanger,
 wherein said wax consists of a ~~The method of claim 10,~~
 ~~wherein said high molecular weight hydrocarbon consists~~
 consisting of C₁₂ and higher.

Claim 12 (currently amended) A method of separating wax from a wax-containing feedstock comprising the steps of:

- b) introducing a wax-containing gas stream into a heating zone, wherein said heating zone contains a first heat exchanger,

- b) elevating said heating zone to a first temperature, wherein substantially all of the wax present in said wax-containing gas stream is prevented from undergoing a phase change,
- c) introducing said wax-containing gas stream into a cooling zone, wherein said cooling zone contains a second heat exchanger, and
- e) reducing said cooling zone to a second temperature, wherein substantially all of the wax present in said wax-containing gas stream is solidified onto the surface of said second heat exchanger.

~~The method of claim 10,~~ wherein said wax-containing gas stream consists primarily of non-condensable air, nitrogen or argon.

Claim 13-25 (cancelled)

Claim 26 (original) A method of separating wax from a waxy gas stream comprising the steps of:

- a) introducing a wax-containing gas stream into a system comprising at least a first heating zone, a second heating zone, a first cooling zone, and a second cooling zone, wherein said first heating zone contains a first heat exchanger, said second heating zone contains a second heat exchanger, said first cooling zone contains a third heat exchanger, and said second cooling zone contains a fourth heat exchanger,
- b) directing said wax-containing gas stream to said first heating zone,

- c) elevating said first heating zone to a first temperature, wherein substantially all of the wax present in said wax-containing gas stream is prevented from undergoing a phase change,
- d) directing said wax-containing gas stream to said first cooling zone,
- e) reducing said first cooling zone to a second temperature, wherein substantially all of the wax present in said wax-containing gas stream is solidified onto the surface of said third heat exchanger, and
- f) increasing said second cooling zone to a third temperature, wherein substantially all of the wax present on the surface of said fourth heat exchanger is melted.

Claim 27 (original) The method of claim 26, further comprising the step of:

- a) collecting said melted wax.

Claim 28 (original) The method of claim 26, wherein steps e) and f) occur approximately concurrently.

Claim 29 (original) The method of claim 26, wherein said first cooling zone and said second cooling zone further comprises at least one device for detecting the presence of said solidified wax on at least one of said third heat exchanger or said fourth heat exchanger.

Claim 30 (original) The method of claim 29, wherein said detection device monitors the pressure drop experienced by said wax-containing gas as it passes through at least one of said first cooling zone or said second cooling zone.

Claim 31 (currently amended) The method of ~~claim 26~~ claim 29, wherein at least one of said first heat exchanger or said second heat exchanger further comprises an inlet and an outlet, and wherein said detection device monitors the change in temperature between said inlet and outlet experienced in at least one of said first heat exchanger or said second heat exchanger.

Claim 32 (currently amended) The method of ~~claim 26~~ claim 29, further comprising the steps of:

- a) monitoring said detection device on said third heat exchanger and said fourth heat exchanger,
- b) determining if either said third heat exchanger or said fourth heat exchanger is substantially covered with said solidified wax,
- c) directing said wax-containing gas stream into either said first heating zone, if said fourth heat exchanger is substantially covered with said solidified wax, or to said second heating zone, if said third heat exchanger is substantially covered with said solidified wax, and
- d) regenerating, either said second cooling zone, wherein substantially all of the wax present on the surface of said third heat exchanger is melted, if said wax-containing gas stream is directed into said first heating zone, or said first cooling zone, by increasing either said first cooling zone or said second cooling zone to a third temperature wherein substantially all of the wax present on the surface of said fourth heat exchanger is melted, if said wax-containing gas stream is directed into said second heating zone.

Claim 33 (withdrawn) An apparatus for separating, comprising:

- a) an inlet conduit,
- b) a first heating zone fluidly connected to said inlet conduit,
- c) a first cooling zone fluidly connected to said first heating zone,
and
- d) an outlet conduit fluidly connected to said first cooling zone.

Claim 34 (withdrawn) The apparatus of claim 33, wherein said first heating zone contains a first heat exchanger.

Claim 35 (withdrawn) The apparatus of claim 33, wherein said first cooling zone contains a second heat exchanger.

Claim 36 (withdrawn) An apparatus for separating, comprising:

- a) an inlet conduit
- b) a first heating zone fluidly connected to said inlet conduit,
- c) a second heating zone fluidly connected to said inlet conduit,
- d) a first cooling zone fluidly connected to said first heating zone,
- e) a second cooling zone fluidly connected to said second
heating zone, and
- f) an outlet conduit fluidly connected to said first cooling zone
and said second cooling zone.

Claim 37 (withdrawn) The apparatus of claim 36, wherein said first heating zone contains a first heat exchanger.

Claim 38 (withdrawn) The apparatus of claim 36, wherein said second heating zone contains a second heat exchanger.

Claim 39 (withdrawn) The apparatus of claim 36, wherein said first cooling zone contains a third heat exchanger.

Claim 40 (withdrawn) The apparatus of claim 36, wherein said second cooling zone contains a fourth heat exchanger.

Claim 41 (withdrawn) The apparatus of claim 38, wherein at least one of said third heat exchanger or said fourth heat exchangers further comprises a detection device for detecting the presence of solidified wax on said third or said fourth heat exchanger.

Claim 42 (withdrawn) The apparatus of claim 39, wherein at least one of said third heat exchanger or said fourth heat exchangers further comprises a detection device for detecting the presence of solidified wax on said third or said fourth heat exchanger.